

# Guest Editorial Preface

## Special Issue on Decision Support System Technology (ICDSST 2017)

Nikolaos Ploskas, Carnegie Mellon University, Pittsburgh, USA

Pavlos Delias, Eastern Macedonia and Thrace Institute of Technology, Kavala, Greece

Isabelle Linden, University of Namur, Namur, Belgium

During May 29th to 31st, 2017, the 3rd International Conference on Decision Support System Technology (ICDSST 2017) was held in Namur, Belgium. That event had a main theme *Data, Information and Knowledge Visualisation in Decision Making* and it was organized by the Euro Working Group on Decision Support Systems (EWG-DSS – briefly introduced in the next page) in collaboration with the University of Namur Belgium, the EFFaTA Research Team of the University of Namur and the Université libre de Bruxelles, Belgium.

The main purpose of the ICDSST 2017 was to attract researchers, developers and specialists in the related areas of decision support, including its methodologies and technologies, as well as application oriented practitioners directed to the implementation of solutions for Information and Knowledge Visualisation, to get together in order to exchange experiences and identify the key issues within the areas in focus, so that exploitation of new approaches and tools for future developments can take place.

From the 53 papers presented at ICDSST 2017, we invited authors of the 16 to submit an enhanced version to this special issue on *Interactive Data Exploration and Decision Support Systems*. The selection was based on the relevance of those works with the topic of the SI, as well as on the potential of those works to evolve into an accomplished research manuscript.

To that invitation 10 authors responded and finally, after a rigorous, double-blind review process, two papers were accepted for publication. The two papers included in this special section tackle important issues in Interactive Data Exploration and Decision Support Systems. The first paper by Alberto Turón, Juan Aguarón, María Teresa Escobar, and José María Moreno-Jiménez, titled “A Decision Support System and visualisation tools for AHP-GDM”, presents a decision support system for the group decision making Analytic Hierarchy Process. The paper also introduces visualisation tools that help decision makers to understand the process followed in the application of the decisional tool and aid the cognitive exploitation of the results. The second paper by Carolina Lino Martins, Pascale Zaraté, Adiel Teixeira De Almeida, and Danielle Costa Morais, titled “Design of a Decision Support System for resource allocation in Brazil public universities”, presents a model-driven decision support system for resource allocation in public universities. The DSS was designed in a spreadsheet-style, where the decision makers can experiment with various models and parameters.

We would like to thank the EWG-DSS and the Editor-In-Chief of IJDSST, Pascale Zaraté who gave us the opportunity to edit this special issue. We are also grateful to the Faculty of Economics, Social Sciences and Business Administration at University of Namur for providing a fantastic avenue and all necessary facilities for ICDSST 2017. Finally, we need to thank all the authors for submitting

their works to be considered for this special issue, even if we had to accept just a small subset. We hope that you will enjoy and that you will find valuable information for your research and practice in this publication!

## **EURO WORKING GROUP ON DECISION SUPPORT SYSTEMS**

The EWG-DSS is a Euro Working Group on Decision Support Systems within EURO, the Association of the European Operational Research Societies. The main purpose of the EWG-DSS is to establish a platform for encouraging state-of-the-art high-quality research and collaboration work within the DSS community. Other aims of the EWG- DSS are to:

- Encourage the exchange of information among practitioners, end-users, and researchers in the area of decision systems;
- Enforce the networking among the DSS communities available and facilitate activities that are essential for the start-up of international cooperation research and projects;
- Facilitate the creation of professional, academic, and industrial opportunities for its members;
- Favor the development of innovative models, methods, and tools in the field of decision support and related areas;
- Actively promote the interest in decision systems in the scientific community by organizing dedicated workshops, seminars, mini-conferences, and conferences, as well as editing special and contributed issues in relevant scientific journals.

The EWG-DSS was founded with 24 members, during the EURO Summer Institute on DSS that took place at Madeira, Portugal, in May 1989, organized by two well- known academics of the OR community: Jean-Pierre Brans and José Paixão. The EWG-DSS group has substantially grown along the years. Currently, we have over 300 registered members from around the world.

Through the years, much collaboration among the group members has generated valuable contributions to the DSS field, which resulted in many journal publications. Since its creation, the EWG-DSS has held annual meetings in various European countries and has taken active part in the EURO Conferences on decision-making-related subjects. Starting from 2015, the EWG-DSS established its own annual conferences, namely, the International Conference on Decision Support System Technology (ICDSST).

The current EWG-DSS Coordination Board comprises of seven experienced scholars and practitioners in the DSS field: Pascale Zaraté (France), Fátima Dargam (Austria), Shaofeng Liu (UK), Boris Delibašić (Serbia), Isabelle Linden (Belgium), Jason Papathanasiou (Greece), and Pavlos Delias (Greece).

*Nikolaos Ploskas*  
*Pavlos Delias*  
*Isabelle Linden*  
*Guest Editors*  
*IJDSST*